

the barcoded vectors. Thus, true mutations (i.e., those that arise naturally in a cell during replication) are readily detectable using the cypher system of the instant disclosure. [0081] The various embodiments described above can be combined to provide further embodiments. All of the U.S. patents, U.S. patent application publications, U.S. patent applications, foreign patents, foreign patent applications and non-patent publications referred to in this specification and/

or listed in the Application Data Sheet are incorporated herein by reference, in their entirety. In general, in the following claims, the terms used should not be construed to limit the claims to specific embodiments disclosed in the specification and claims, but should be construed to include all possible embodiments along with the full scope of equivalents to which such claims are entitled. Accordingly, the claims are not limited by the disclosure.

SEQUENCE LISTING

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 <223> OTHER INFORMATION: Random cypher sequence
 <220> FEATURE:
 <221> NAME/KEY: misc_feature
 <222> LOCATION: (1)..(7)
 <223> OTHER INFORMATION: n = A,T,C or G

<400> SEQUENCE: 1

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7

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 <213> ORGANISM: Artificial Sequence
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